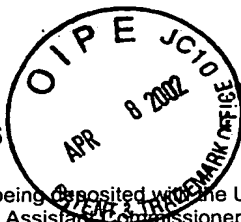


Docket No.: Z&P-INFN10176



#4

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

By:  Date: April 2, 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Gabriela Brase et al.
Appl. No. : 10/073,550
Filed : February 11, 2002
Title : Etching Process for a Two-Layer Metallization
Art Unit : 1765

LETTER

Hon. Commissioner of Patents and Trademarks,
Washington, D.C. 20231

Sir:

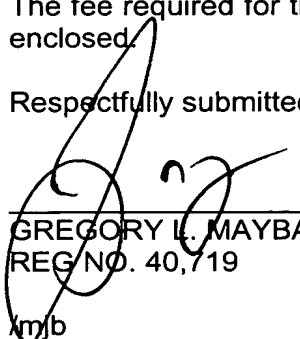
The above-mentioned new patent application was filed on February 11, 2002 without a signed oath or declaration, under the provision of 37 C.F.R. 1.53(f).

In accordance with the above-mentioned rule, enclosed herewith is the original signed declaration as required by the Notice To File Missing Parts Of Application dated March 8, 2002.

The undersigned hereby states that the application filed in the Patent and Trademark Office is the application which the inventor(s) executed by signing the declaration. MPEP 601.01(a).

The fee required for the late filing of an oath or declaration in the amount of \$130.00 is also enclosed.

Respectfully submitted,



GREGORY L. MAYBACK
REG NO. 40,719

lmb
Date: April 2, 2002
Lerner and Greenberg, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480
Tel: (954) 925-1100
Fax: (954) 925-1101



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/073,550	02/11/2002	Gabriela Brase	Z&P-IPFN10176

CONFIRMATION NO. 5088

FORMALITIES LETTER



OC000000007606363

LERNER AND GREENBERG, P.A.
PATENT ATTORNEYS AND ATTORNEYS AT LAW
Post Office Box 2480
Hollywood, FL 33022-2480

Date Mailed: 03/08/2002

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(l) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 130.**

*A copy of this notice **MUST** be returned with the reply.*

Tram Chau

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

04/09/2002 SDENR0B1 00000002 10073550

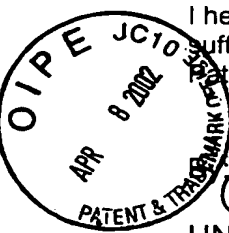
01 FC:105

130.00 DP

GP1765

Docket No.: Z&P-INFN10176

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.



Date: April 4, 2002

UNITED STATES IN THE PATENT AND TRADEMARK OFFICE

Applicant : Gabriela Brase et al.
Applic. No. : 10/073,550
Filed : February 11, 2002
Title : Etching Process for a Two-Layer Metallization
Art Unit : 1765

LETTER

Hon. Commissioner of Patents and Trademarks,
Washington, D. C. 20231

RECEIVED
APR 9 - 2002
TC 1700

Sir:

Enclosed please find a copy of the English translation of the International Preliminary Examination Report for the above-identified application. Please enter it into the file.

Respectfully submitted,

For Applicants

LAURENCE A. GREENBERG
REG. NO. 29,308

Date: April 4, 2002

Lerner and Greenberg, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480
Tel: (954) 925-1100
Fax: (954) 925-1101

/bmb

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference INF-P10176WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP00/07784	International filing date (day/month/year) 10 August 2000 (10.08.00)	Priority date (day/month/year) 11 August 1999 (11.08.99)
International Patent Classification (IPC) or national classification and IPC H01L 21/311, 21/768		
Applicant INFINEON TECHNOLOGIES AG		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>2</u> sheets.</p>	
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>	

Date of submission of the demand 06 March 2001 (06.03.01)	Date of completion of this report 15 November 2001 (15.11.2001)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP00/07784

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages 1-7, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages 1-6, filed with the letter of 10 September 2001 (10.09.2001)
- ☒ the drawings:
pages 1/1, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP00/07784

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☒ the entire international application.

☐ claims Nos. _____

because:

☐ the said international application, or the said claims Nos. _____ relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____ are so unclear that no meaningful opinion could be formed (*specify*):

See the supplemental box

☒ the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. _____

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 00/07784

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III

1. Claim 1 is not clear, since the feature "is processed with extended etching time" is vague owing to the fact that no reference value is given (for an etching time that is not extended). The description, page 5, lines 15-17 states that the etching time is at least doubled relative to a conventional O₂/N₂ ARC open process "so that the polymers in the via can be reduced", which is vague and not useful for clarifying as long as the desired amount of polymer reduction is not specified.
2. The specified flow of the etching gases in Claim 1 is disclosed only in conjunction with the other values specified on page 3 of the description, lines 3 to 12. This part of the description teaches not only that there is a fixed etching time, but it also discloses additional gases which influence the process, for example, oxygen. According to page 4, lines 18-21, oxygen influences the structure of a protective sidewall polymer layer and, according to Claim 1, the polymer intermediate layer and the oxide layer are etched in a common etching process. Thus only a combination of Claims 1 to 6 is supported by the description.

DOCKET NO.:
SERIAL NO.:
APPLICANT:
LERNER AND GREENBERG P.A.
P.O. BOX 5480
HOLLYWOOD, FLORIDA 33035
TEL. (954) 652-1100